## Montana Board of Oil and Gas Conservation Environmental Assessment

| Operator: American Midwest Oil & Gas Corp                                                                                                             |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Well Name/Number: Koenig 12-33                                                                                                                        |
| Location: SW NW Section 33 T35N R1E                                                                                                                   |
| County: Toole MT; Field (or Wildcat) Wildcat                                                                                                          |
|                                                                                                                                                       |
| Air Quality                                                                                                                                           |
| (possible concerns)                                                                                                                                   |
| Long drilling time: No, 4 to 5 days drilling time.                                                                                                    |
| Unusually deep drilling (high horsepower rig): No, 3200' TD                                                                                           |
| Possible H2S gas production: Yes                                                                                                                      |
| n/near Class I air quality area: No                                                                                                                   |
| Air quality permit for flaring/venting (if productive): _): _Yes, DEQ air quality permit                                                              |
| required under 75-2-211.                                                                                                                              |
|                                                                                                                                                       |
| Mitigation:                                                                                                                                           |
| X Air quality permit (AQB review)                                                                                                                     |
| Gas plants/pipelines available for sour gas                                                                                                           |
| Special equipment/procedures requirements<br>Other:                                                                                                   |
| Comments: N special concerns – using small rig to drill to 3200'                                                                                      |
| Commente. 14 Special concerns— doing officing to drin to 6200                                                                                         |
| Water Quality                                                                                                                                         |
| (possible concerns)                                                                                                                                   |
| Salt/oil based mud: No, freshwater mud system, air and air mist.                                                                                      |
| High water table: No                                                                                                                                  |
| Surface drainage leads to live water: No, closest drainage is Nine Mile Coulee, an                                                                    |
| ephemeral drainage.                                                                                                                                   |
| Water well contamination: No                                                                                                                          |
| Porous/permeable soils: No, sandy bentonitic soils.                                                                                                   |
| Class I stream drainage: No Mitigation:                                                                                                               |
| Lined reserve pit                                                                                                                                     |
| X Adequate surface casing                                                                                                                             |
| Berms/dykes, re-routed drainage                                                                                                                       |
| Closed mud system                                                                                                                                     |
| Off-site disposal of solids/liquids (in approved facility)                                                                                            |
| Other:                                                                                                                                                |
| Comments: Surface hole will be drilled to 300' and 7" casing cemented to                                                                              |
| surface. This is adequate to protect freshwater zones. Also, air/air mist and/or fresh                                                                |
| water mud systems to be used.                                                                                                                         |
| Soils/Vegetation/Land Use                                                                                                                             |
| (                                                                                                                                                     |
| (possible concerns)                                                                                                                                   |
| Steam crossings: No, stream crossings.                                                                                                                |
| High erosion potential: No, flat cultivated area, little cut/fill required.  Loss of soil productivity: No, location will be restored after drilling. |
| 2000 of con productivity. 140, location will be rectioned after arming.                                                                               |

| Unusually large wellsite: No. 200'X200' location size required.  Damage to improvements: Slight, cultivated field.  Conflict with existing land use/values: Slight  Mitigation  Avoid improvements (topographic tolerance)  Exception location requested  X Stockpile topsoil  Stream Crossing Permit (other agency review)  X Reclaim unused part of wellsite if productive  Special construction methods to enhance reclamation  Other                  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Comments: No special concerns                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Health Hazards/Noise                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| (possible concerns)  Proximity to public facilities/residences: Next to Suphellen road  Possibility of H2S: None  Size of rig/length of drilling time: Small drilling rig/short 4 to 5 days drilling time  Mitigation:                                                                                                                                                                                                                                    |
| Wildlife/recreation                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| (possible concerns)  Proximity to sensitive wildlife areas (DFWP identified): None identified.  Proximity to recreation sites: No  Creation of new access to wildlife habitat: No  Conflict with game range/refuge management: No  Threatened or endangered Species: No  Mitigation:  Avoidance (topographic tolerance/exception)  Other agency review (DFWP, federal agencies, DSL)  Screening/fencing of pits, drillsite  Other:  Comments: No concerns |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Historical/Cultural/Paleontological  (possible concerns)  Proximity to known sites: None identified  Mitigation  avoidance (topographic tolerance, location exception)                                                                                                                                                                                                                                                                                    |
| other agency review (SHPO, DSL, federal agencies)                                                                                                                                                                                                                                                                                                                                                                                                         |

| Other:                                                                                                  |
|---------------------------------------------------------------------------------------------------------|
| Comments: Private surface lands.                                                                        |
|                                                                                                         |
|                                                                                                         |
| Social/Economic                                                                                         |
| (possible concerns)                                                                                     |
| Substantial effect on tax base                                                                          |
| <ul><li>Create demand for new governmental services</li><li>Population increase or relocation</li></ul> |
| Comments: No concerns                                                                                   |
|                                                                                                         |
|                                                                                                         |
| Remarks or Special Concerns for this site                                                               |
| Well in a 2200' Nieku toet                                                                              |
| Well is a 3200' Nisku test                                                                              |
| Summary: Evaluation of Impacts and Cumulative effects                                                   |
|                                                                                                         |
| No long term impacts expected, some short term impacts will occur, but can be                           |
| mitigated.                                                                                              |
|                                                                                                         |
| I conclude that the approval of the subject Notice of Intent to Drill (does/does not)                   |
| constitute a major action of state government significantly affecting the quality of the                |
| human environment, and (does/ <u>does not</u> ) require the preparation of an environmental             |
| impact statement.                                                                                       |
| Prepared by (BOGC): Thomas Richmond                                                                     |
| (title:) Administrator                                                                                  |
| Date: December 13, 2013                                                                                 |
| Other Persons Contacted:                                                                                |
| Montana Bureau of Mines and Geology, GWIC website                                                       |
| (Nlama and Arana)                                                                                       |
| (Name and Agency) Toole County water well                                                               |
| (subject discussed)                                                                                     |
| December 13, 2013                                                                                       |
| (date)                                                                                                  |
| If location was inspected before permit approval:                                                       |
| Inspection date:                                                                                        |
| Inspector:                                                                                              |
| Others present during inspection:                                                                       |